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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,512	09/09/2003	Larry Lunt	14267	1799

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EXAMINER

DUNN, DAVID R

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/658,512	<b>Applicant(s)</b> LUNT ET AL.	
	<b>Examiner</b> David Dunn	<b>Art Unit</b> 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14, 17-22, 24, 26-33, 35-38, 40, 42-55 and 57-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14, 17-22, 24, 26-33, 35-38, 40, 42-55 and 57-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This Office Action is responsive to the amendment filed October 24, 2005.

#### *Drawings*

1. The drawings were received on 10/24/05. These drawings are acceptable.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the airbag being “disposed between the inner skin and a trim panel” or the “door core cover[ing] the airbag” (claim 60) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. [Note: it appears that only the core 76 is between the inner skin and the trim panel, see Figure 4; the airbag is not between the inner skin and the trim panel.]

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet”

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. Claims 1-12, 14, 17-22, 24, 26-33, 35-38, 40, 42-55, and 57-70 are objected to because of the following informalities: claims 1, 26, 42, and 52 claim that the airbag is “disposed between the inner skin and a trim panel”, however it does not appear that the airbag is actually between these two elements. The airbag is positioned in a recess of the inner skin, the airbag is between a shell layer 88 and the outer skin 30, but not between the trim panel 38 and the inner skin 32; see Figure 4. The only elements actually between the trim panel and the inner skin are a core 76 (see Figure 4) and the end of bracket 46 as seen in Figure 3. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 52-55, 57-63, 65, 69, and 70 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 52 and 65 recite the limitation "the size of the airbag". There is insufficient antecedent basis for this limitation in the claim; it is unclear if the size of the airbag refers to the

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folded state, unfolded state, inflated or uninflated state of the airbag. It is unclear what is “the size” of the airbag.

*Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 6-10, 12, 17, 20-22, 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakakida et al. (US 6,378,896).

Sakakida et al. discloses a pelvic airbag comprising: a front panel (52; see Figure 10) and a rear panel (53) attached to the front panel, the airbag being constructed to be retained in a recess (26; see column 8, lines 23-33) of an inner skin (20) of a vehicle door, so that the airbag is disposed between the inner skin and a trim panel (43), wherein the airbag is attached to an attachment mechanism comprising on or more mounting brackets (44) that span the rear panel (see Figure 8), wherein one or more fasteners (40a) engage the one or mounting brackets and attach the airbag to the inner skin. The airbag is in fluid communication with an inflator (70) housed within an inflator housing (45). The lateral length of the airbag will inherently decrease as the airbag inflates and becomes thicker. Sakakida shows a bowed reaction beam (28) attached to the inner skin to support the airbag. The brackets are attached to the airbag via connectors (via connection through the inflator).

*Claim Rejections - 35 USC § 103*

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 26, 29-31, 33, 37, 38, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakida et al. in view of Eyraier (US 6,302,436).

Sakakida et al. is discussed above but does not show the airbag positioned entirely below an armrest of the vehicle door.

Eyraier teaches a pelvic airbag that is positioned entirely below an armrest of the vehicle door (see Figure; see also column 2, lines 47-50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sakakida et al. in order to provide the airbag at a position below the armrest in order to better protect the lower body portion of the occupant. Regarding claim 31, Sakakida et al. shows a rubber dampener (24).

10. Claims 2-4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakida et al. in view of Glance (US 5,382,051).

Sakakida et al. is discussed above but does not disclose the size of the folded airbag.

Glance teaches an airbag (12) having folds (15, 16) which provide the airbag with an uninflated thickness of about 0.5 inch or 12.7 mm (see column 4, lines 5-9). Glance also teaches weldments (heat-staked connectors 58-59; Figure 16).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sakakida et al. with the teachings of Glance to fold the airbag such that it has an uninflated thickness of about 12 mm in order to reduce the space requirements for the airbag.

With respect to claim 4, given the teachings of Sakakida et al. and Glance that thin airbags are advantageous, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further reduce the thickness of the airbag (e.g. to 4 mm) in order to reduce the space requirements for the airbag. Further, such a modification involving a mere change in size is generally recognized as being within the level of ordinary skill in the art.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakida et al. in view of Galbraith et al. (US 5,615,914).

Sakakida et al. is discussed above and fails to show a plastic or metal airbag.

Galbraith et al. teaches a side airbag constructed of metal (see Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sakakida et al. with the teachings of Galbraith et al. to construct the airbag of metal in order to provide an improved airbag material.

12. Claims 11, 42, 43, 46, 47, 49, 51, 52, 55, 57, 58-61, 63, 68 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakida et al. in view of Shepherd et al. (6,286,858).

Sakakida et al. is discussed above but does not show a rubber damper.

Shepherd et al. teaches an airbag assembly with a rubber damper (76) for attaching an inflator housing.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sakakida et al. with the teachings Shepherd et al. to provide a rubber damper between the reaction beam and the inflator housing to absorb vibrations that may adversely affect the airbag inflator.

13. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakida et al. in view of Marriott et al. (US 6,302,437).

Sakakida et al. is discussed above but fails to show a shell layer attached to the front panel.

Marriott teaches an airbag with a shell layer (80) attached to the front panel.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sakakida et al. with the teachings of Marriott et al. in order to further strengthen the side panel of the door.

14. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakida et al. in view of Eyraier as applied above, and further in view of Galbraith et al.

The combination of Sakakida et al. and Eyraier is discussed above and fails to show a plastic or metal airbag.

Galbraith et al. teaches a side airbag constructed of metal (see Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sakakida et al. and Eyraier with the teachings of Galbraith et al. to construct the airbag of metal in order to provide an improved airbag material.

15. Claims 27, 28, 35, and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakida et al. in view Eyraier and in further view of Glance (US 5,382,051).



The combination of Sakakida et al. and Eyrainer is discussed above but does not disclose the size of the folded airbag.

Glance teaches an airbag (12) having folds (15, 16) which provide the airbag with an uninflated thickness of about 0.5 inch or 12.7 mm (see column 4, lines 5-9). Glance also teaches weldments (heat-staked connectors 58-59; Figure 16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sakakida et al. and Eyrainer with the teachings of Glance to fold the airbag such that it has an uninflated thickness of about 12 mm in order to reduce the space requirements for the airbag.

With respect to claim 28, given the teachings of Sakakida et al. and Glance that thin airbags are advantageous, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further reduce the thickness of the airbag (e.g. to 4 mm) in order to reduce the space requirements for the airbag. Further, such a modification involving a mere change in size is generally recognized as being within the level of ordinary skill in the art.

16. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakida et al. in view Eyrainer and in further view of Marriott et al. (US 6,302,437).

The combination of Sakakida et al. and Eyrainer is discussed above but fails to show a shell layer attached to the front panel.

Marriott teaches an airbag with a shell layer (80) attached to the front panel.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sakakida et al. and Eyrainer with the teachings of Marriott et al. in order to further strengthen the side panel of the door.

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17. Claims 44 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakida et al. in view Shepherd et al. and in further view of Glance (US 5,382,051).

The combination of Sakakida et al. and Shepherd et al. is discussed above but does not disclose the size of the folded airbag.

Glance teaches an airbag (12) having folds (15, 16) which provide the airbag with an uninflated thickness of about 0.5 inch or 12.7 mm (see column 4, lines 5-9). Glance also teaches weldments (heat-staked connectors 58-59; Figure 16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sakakida et al. and Shepherd et al. with the teachings of Glance to fold the airbag such that it has an uninflated thickness of about 12 mm in order to reduce the space requirements for the airbag.

18. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakida et al. in view Shepherd et al. and in further view of Galbraith et al. (US 5,615,914).

The combination of Sakakida et al. and Shepherd et al. is discussed above and fails to show a plastic or metal airbag.

Galbraith et al. teaches a side airbag constructed of metal (see Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sakakida et al. and Shepherd et al. with the teachings of Galbraith et al. to construct the airbag of metal in order to provide an improved airbag material.

19. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakida et al. in view Shepherd et al. and in further view of Marriott et al. (US 6,302,437).

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The combination of Sakakida et al. and Shepherd et al. is discussed above but fails to show a shell layer attached to the front panel.

Marriott teaches an airbag with a shell layer (80) attached to the front panel.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sakakida et al. and Shepherd et al. with the teachings of Marriott et al. in order to further strengthen the side panel of the door.

20. Claims 62 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakida et al. in view of Shepherd et al. and in further view of Eyraier (US 6,302,436).

The combination of Sakakida et al. and Shepherd et al. is discussed above but does not show the airbag positioned entirely below an armrest of the vehicle door.

Eyraier teaches a pelvic airbag that is positioned entirely below an armrest of the vehicle door (see Figure; see also column 2, lines 47-50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sakakida et al. and Shepherd et al. in order to provide the airbag at a position below the armrest in order to better protect the lower body portion of the occupant. Regarding claim 31, Sakakida et al. shows a rubber dampener (24).

### ***Response to Arguments***

21. Applicant's arguments with respect have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

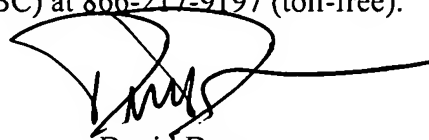
23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cheung et al. shows a pelvic airbag of interest.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Dunn whose telephone number is 571-272-6670. The examiner can normally be reached on Mon-Fri, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'David Dunn', with a long horizontal line extending to the right.

David Dunn  
Primary Examiner  
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